



ALNWICK RURAL DISTRICT.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH.

1911.

Alnwick Rural District Council.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH.

FOR THE YEAR 1911.

Mr. CHAIRMAN, LADIES and GENTLEMEN,

The climatic conditions of the year 1911 were such as to ensure its being remembered as one of years with an unusually fine and hot summer. The temperatures recorded all through the year were considerably above average. The early months were quite free from any severe snowstorms, and spring came early. A somewhat chilly April was succeeded by an exceptionally fine May, and by the end of the latter month we had experienced higher temperatures than usually fall to our lot in the summer months. Towards the end of June the then very severe drought was relieved by a heavy fall of rain, which amounted to over 4 inches in two days. During July and August the amount of sunshine was greatly above average and the temperatures on several occasions ran higher than any previously recorded. The latter months of the year were mild and wet and no snow fell up to the end of December. Considering the brilliancy and heat of the summer the water supplies were well maintained.

Vital Statistics.

The vital statistics for this year are more than usually interesting, chiefly for the reason that they are more exact. The census having been taken in 1911, we now base our calculations on an entirely new and for the time correct set of figures. During the ten years 1891-1901, the population of the District increased 320, and estimates for the next ten years had to be based on the continuance of that increase. In my report for 1910 I wrote "From my observations in the district, I very much doubt if this increase has been maintained, as fewer new houses have been built than in the last decade, and where building has been going on, it has been mostly to replace old houses with new." The 1911 census

shows that I was right in surmising that there had been no increase of the population of the district, but I confess that I am surprised to find that a decrease has occurred in a somewhat greater ratio than the supposed increase. Thus in 1901 the population of the district was 12,516, being an increase of 320 on the population of 1891. Taking this as a basis for calculation the population in 1911 would have been 12,836. The actual figures for 1911 are 12,151, showing that instead of the estimated increase of 320, we have an actual decrease of 365.

As regards the Sub-districts the variations are as follows:—

	Warkworth.	Embleton.	Denwick.
1901.	7036	4811	669
1911.	6873	4558	720

Thus in the Warkworth Sub-district we find a decrease of 163, in the Embleton Sub-district a decrease of 253, while in the Denwick Sub-district we have an increase of 51. This increase in the Denwick Sub-district may, I think, be accounted for by the fact that the Denwick Quarry Houses were removed from South Charlton in the Embleton Sub-district and re-erected on their present site.

The following table shows the number of births and deaths registered in the district, and for comparison the figures of the two previous years are also given.

		Birth-Rate per 1000 per annum.	Deaths. per annum.	Death-Rate per 1000 per annum.
1909.	286	22.85	137	10.94
1910.	249	19.89	139	11.10
1911.	260	21.39	147	12.09

From the above it will be seen that the number of births in 1911 was greater than in 1910 by 11, and less than in 1909 by 26. The birth-rate in 1911 was greater than that in 1910 by 1.50, and less than that of 1909 by 1.46.

The number of deaths in 1911 was greater than in 1910 by 8, and greater than in 1909 by 10, and the death-rate in 1911 was greater than in 1910 by .99, and also greater than in 1909 by 1.15.

A fallacy is introduced in this comparison, as the birth and death-rates for 1911 are calculated on the census of 1911, i.e., 12,151, whereas the rates for 1909 and 1910 are calculated on the census of 1901, i.e., 12,516.

As regards sex, the deaths were divided fairly equally, viz., 77 males and 70 females.

The following table shows the distribution of the deaths as regards the Sub-districts, and the numbers for the two preceding years are given for comparison.

	Warkworth	Embleton.	Denwick.
1909.	86	42	9
1910.	80	52	7
1911.	90	50	7

During the first eleven months of the year 1911 it looked as if the number of deaths registered in the Sub-district would closely correspond with the year before, but a sudden increase in the Warkworth Sub-district was caused by the registration of 19 deaths for December. The average number for that district for the first eleven months had been 7.3.

The following table shows the death-rates for the various Sub-districts:—

Deaths.	Death-Rate.	Deaths.	Death-Rate.	Deaths.	Death-Rate.
90.	13.09	50	10.89	7	9.72

From the above it will be seen that the death-rate in the Warkworth Sub-district is considerably in excess of that in the two other Sub-districts. This has usually been so, the rule apparently being that the more purely rural the population the smaller the death-rate.

The deaths may be analysed according to age at death. For this purpose, the Local Government Board has this year adopted a new classification which will be found in Table III. at the end of this Report.

As, however, in this part of the Report I wish to compare the figures of 1911 with those of 1910 and 1909, I will here use the old classification for the last time.

	Under one year.	1 year & under 5 years.	5 years & under 15 years	15 years & under 25 years.	25 years & under 65 years.	65 years and over.
1909.	30	7	6	4	38	52
1910.	22	6	7	7	53	44
1911.	17	6	7	10	42	65

Here, as in the rest of the body of this Report, the numbers given include only such deaths as actually occurred within the district. During the year 1911 the Registrar General has inaugurated a system by which with much greater exactness deaths of persons belonging to a district and occurring outside the district are referred back to it, and vice versa deaths of persons not belonging to the district, but occurring within it, are subtracted. Those corrections are shown in the Tables at the end of the Report. As in our district we have neither Hospital (except Smallpox Hospital, fortunately unused), Workhouse or Asylum, the process is much more generally that of addition than subtraction.

Referring to the above Table it is satisfactory to note that even with a larger total number of deaths to account for, the position of these deaths is more satisfactory in 1911 than in either of the two preceding years. Thus the deaths under one year show a marked decrease. Also the deaths under 25 years show a steady decrease, thus in 1909 they were 41, in 1910 42, and in 1911 40. Also it may be noted that the unsatisfactory proportion which existed in 1910 between the deaths from 25 and 65 to those over 65 have been reversed.

The percentage of deaths over 65 was, in 1910, 44.2, as against 31.4 in 1910 and 38.6 in 1909.

The Infantile death-rate for the whole district was 65.3 per 1000 children born, as against 88.3 in 1910 and 104.8 in 1909.

In Warkworth Sub-district 156 children were born, and 10 died under one year.

In Embleton Sub-district 92 children were born, and 6 died under one year.

In Denwick Sub-district 12 children were born, and 1 died under one year.

This gives the Sub-districts the following Infantile death-rates:—

Warkworth.	Embleton.	Denwick.
64.1	65.2	83.3

From the above it will be seen that the reduction which has for several years been going on in the Infantile death-rate is not only maintained, but also greatly improved on. Going back a decade I find on examining my report for 1901 that the Infantile death-rate for the whole district was 151.5, and that in the Warkworth sub-district it was as high as 177 per thousand children born.

These figures speak for themselves, specially as the diminution has been gradual and not the result of a chance healthy year. The two most powerful factors in the reduction of the Infantile death-rate have no doubt been improved sanitary conditions and the more enlightened methods of feeding young children, whether partly breast or entirely bottle fed.

The greatest number of deaths for one month, viz., 25, occurred in December, and the smallest, viz., 6, in January and July.

The total number of births for the year 1911 was 260, giving a birth-rate of 21.39 for the whole district, distributed over the Sub-districts as follows:—

Warkworth		Embleton.		Denwick.	
Births.	Birth-Rate.	Births.	Birth-Rate.	Births.	Birth-Rate.
156	22.69	92	20.18	12	16.66

Of the births, 142 were males and 118 females.

Infectious Diseases.

During the year 1911, 74 cases of infectious disease have been notified in the district. Of the cases reported 20 were Scarlet Fever, 39 Diphtheria, 6 Enteric Fever, 7 Erysipelas, and 2 Puerperal Fever.

The following table shows the distribution of the infectious diseases as regards the Sub-districts:—

Sub-district.	Scarlet.		Enteric		Puerperal	Totals.
	Fever.	Diphtheria.	Fever.	Erysipelas.	Fever.	
Warkworth	5	35	6	2	2	50
Embleton.	15	4	0	5	0	24
Denwick	0	0	0	0	0	0
	20	39	6	7	2	74

The above numbers, although not approaching those of 1910, when only 36 cases were notified, are yet below average. In the early months of the year 1911 the district was very free from infectious disease, but as

the year went on, and specially when a wet autumn followed a very hot summer; notifications became more frequent, and during the last two months we had serious epidemics to deal with.

SCARLET FEVER.—This disease appeared in an epidemic form in and about Embleton early in summer. It was dealt with by school closure and disinfection of the affected houses, and subsided after 14 cases had been notified. The other six cases notified appeared as sporadic outbreaks and did not spread.

DIPHTHERIA.—There has during the year 1911 been an increasing prevalence of this disease in the district, and this, in the later two months, culminated in a serious epidemic in and about Lesbury. Beyond this epidemic the only serious outbreaks were one of six cases at Shilbottle in the Spring, and another at Acklington Park Farm in the Autumn. This latter, although confined to two families, affected nine individuals.

The Lesbury epidemic began at the end of October, and it was noticeable that not only were all the cases of school age but all came from one particular part of the school. The school was closed for three weeks. On examination of the buildings the only defect found was that no shaft had been fitted to the ventilator at the head end of the main drain, although there was one a few yards further down. This defect was at once remedied. As no fresh cases were notified, except in houses already infected, school was re-opened, the affected families being excluded. In the beginning of December cases began to be reported again, and from the same quarter of the school. The school was again closed and the County Medical Officer kindly came and took swabs of all the children, numbering about 55, in the suspected part of the school. Ten children, all apparently well, and in unaffected houses, were found to have diphtheria germs in their throats. At my request a large quantity of formalin tabloids was distributed to the infected families, and later swabs were taken by the School Medical Officer from the throats of practically all the children at the school, over a hundred in number. This time 24 children, apparently well, were found to be infected, although only two of those who showed it the first time were declared positive. Tabloids were again distributed in large numbers, and notifications of actual cases of diphtheria ceased at the end of the year, but nevertheless it was considered inadvisable to open the school for some weeks. Early in the epidemic it was decided by the Council, on my advice, to issue diphtheria antitoxin free, both for treatment and prevention in cases where expense was likely to preclude its free use.

No slates are used in the Lesbury School, and it has been arranged that each pupil is to have his or her separate pens and pencils, so as to prevent infection from sucking the ends of those articles.

ENTERIC FEVER.—An epidemic of Enteric Fever occurred in the latter part of the year. The seriousness of this outbreak consisted not in the number of cases, but in the large percentage of fatalities. Of the seven persons affected, five died and two recovered. One of the patients had left the district during the period of incubation and died at home,

and so was not notified in this district. The first case was one notified at Alnmouth on October 9th. This patient was a traveller, and as there was a history of his having drunk some questionable water, and as no serious defects were found in his house, do definitely local significance could be attached to the case. Even now it seems doubtful whether this case was part of the real epidemic, as no further cases appeared until December 11th, between which date and December 19th five cases were notified. The common feature in these cases was that all persons affected were supplied with water from the old Alnmouth Supply. This supply is derived from Trobe's Dene, above the Shilbottle Colliery, and is carried in 4-inch socketed earthenware pipes to a reservoir above Alnmouth Station. Thence it is carried in iron pipes to Alnmouth, being joined just above Alnmouth Station by the new Alnmouth or Snableazes supply, which latter is about twice the volume of the old supply. The earthenware pipes of the old supply have long been defective and have required frequent rodding-out for roots, which entered the joints freely. With a view to localizing the contamination it is interesting to follow this line of pipes and take in conjunction the occurrence of the cases of enteric fever. Thus, the first place supplied is Bilton Banks Colliery Village, of about 200 inhabitants—no cases. Next Greenrig Kennels, with a small population, two cases—both fatal. Next Bilton Farm, two cases—one fatal. Next Alnmouth, three cases—two fatal. At Bilton Farm house some difficulty was found in explaining the outbreak, as in the house there is an independent supply, although there is a tap from the old Alnmouth Supply in the back yard, but it was ascertained that on account of some turbidity of the house supply, water from the yard tap had been used. Negative proof of the origin of the disease was afforded by the fact that neither Bilton Village nor Alnmouth Station and Cottages, which have an independent supply (although they lie beside the Alnmouth pipe track), were affected. This all goes to show that the contamination took place somewhere between Bilton Banks and Greenrig Kennels. This old supply was at once cut off from Alnmouth and hand-bills distributed advising boiling all water for domestic purposes. After that there were no fresh cases. Alnmouth can do well enough in winter on the new supply alone, and Bilton Farm House has an independent supply, but, unfortunately, no provision can be made for Greenrig Kennels until the pipes of the old supply are replaced by a new iron main, a course which the Council has agreed to take. Neither ordinary nor bacteriological examination of the water gave any positive result, but the really important point is that the freedom from the disease at Bilton Banks Village shows that the water is itself good if carried in an impervious line of modern iron water pipes.

During the year 1911 there were registered in the district 7 deaths from notifiable infectious disease, viz., 4 from diphtheria and 3 from enteric fever. This gives a death-rate of .57 per thousand per annum.

N.B.—One case of enteric fever mentioned died out of the district, and another died in January, 1912

Whooping cough caused two deaths, Influenza two deaths, and Diarrhoea and Enteritis 6 deaths, giving a total of deaths from Zymotic diseases of 17.

This gives a Zymotic death-rate of 1.39 per thousand per annum.

I have, during 1911, inspected practically every house in which infectious disease was notified, and have had disinfection carried out at the expense of the Council wherever, in my opinion, the cost of disinfecting efficiently was too great for the occupiers.

REPORT OF THE SANITARY INSPECTOR.

SEWERAGE AND DRAINAGE.

DISPOSAL OF SEWAGE.

The arrangements for the sewerage of the district are now fairly satisfactory, but improvements for the disposal of sewage could be made at Boulner Moor, Christon Bank, Rennington, and Togston. The County Medical Officer of Health stated in his annual report for 1910 that your record of improvements carried out is very creditable," but during 1911 the list is much longer.

The South Sewage Settling Tank at Embleton has been covered over with ferro-concrete and in other ways converted into a Septic Tank. Additional ventilation has been provided for the tide-locked sewers at Alnmouth, and at this place a sewer has been re-laid with glazed stone-ware socketed pipes for a distance down the Wellfield. An extra man-hole has been provided for the sewer at Togston. The contract for the Warkworth Sewerage Scheme, which was let for £475, has been completed according to the plans of your Surveyor, without any extras. The outfall consists of 9-inch cast-iron pipes, set in concrete, and furnished with a tidal flap on the freestone bed of the tidal river Coquet at Beal Bank. Above the outfall a detritus tank is constructed with a cast-iron bell-mouthed inlet, and a cast-iron slotted pipe outlet, below sewage level. The sewer is continued up the Acklington Road past Old Barns as far as Warkworth Cottage. A branch is laid along the road to the Grange Boarding Establishment, and a third branch past other new houses to Proctor's cottages, all with good falls and gradients. Inspection chambers are placed at every change in direction or gradient of the sewer, and placed not more than 120 yards apart, and flushing and ventilating appliances are provided where needed. This is in addition to the comprehensive system of main sewers carried out for the village of Warkworth, at a cost of £650 in 1898.

At the instance of your Council improvements have been carried out during the past year at the following places:—Low Broompark, North Charlton, West Ditchburn, Titlington, Warkworth, Dunstan, Glanton, Christon Bank, Embleton, Felton Village, School and Mill.

PRIVIES, WATERCLOSETS, Etc.

Approximately there are about 1,800 privies in the district with fixed receptacles, 200 with movable receptacles, and about 50 earth closets. About 500 water closets are estimated, also 8 flushed with waste water.

New offices have been built, or others remodelled, at Edlingham School, Titlington, Felton, Low Broompark, Swarland, Birling, Embleton, Glanton. The offices at Thompson's yard, Warkworth, have been remodelled, and new water closets built in place of privies.

PRIVATE SLAUGHTER HOUSES.

By the discontinuance of the slaughter house in the centre of the village at Glanton, which is a great sanitary improvement, there are now eight of the above in this rural district. At one in Warkworth in the Tithe Barn Lane the walls have been cemented to facilitate cleansing, and a gulley inside has been removed to the open air. Another slaughter house in the main street, Warkworth, is in such a position, and kept in such a manner as to be a recurring nuisance.

OFFENSIVE DITCHES AND COLLECTIONS OF MATTER.

The runner known as the "Lady Burn," which receives sewage from Togston and North Broomhill, has been cleaned out for a distance of 924 yards, in conjunction with the Morpeth R.D.C. The ditch which receives a small quantity of sewage at Felton has been cleaned out. The stream at Rennington is polluted by about half a dozen drain outlets, and as reported "causes a nuisance dangerous to health, especially at the bridge."

The public systems of scavenging at Alnmouth, and Togston, carried out by your Council, continue to be satisfactory. The tidal river at Warkworth is polluted with refuse thrown down the river banks, owing to the absence of a scavenging system in this village, which is resorted to by visitors. Neither is there any arrangement for scavenging at Embleton, which also receives visitors in summer. Like other villages the scavenging is done in a perfunctory manner by local farmers, when their men have nothing else to do, and as their servants seldom receive any payment, they have, on certain occasions, stopped going altogether. When a notice is served upon half a dozen occupiers using the same ashpit in a tenemented yard, it generally ends in two or three occupiers each taking off a thin layer as "their share," with the result that the ashpit is never really cleared out.

WATER SUPPLY.

All the supplies from water works in this district are on the constant system. None are on the intermittent system, i.e., turned on for a few hours each day.

A steady flow of water was noticed by the Inspector to be running in a ditch near the spring chamber at Rock, in the Craster and Dunstan water supply, which was considered to be land drainage, according to local opinion. A couple of drainers were employed to ascertain if this was the fact, when the chamber was found to be leaking all round at the extraordinary rate of 60 gallons a minute. Concrete made with quick setting cement has since been filled in round the outer walls, and let into a groove in the rock. This work having been successful it has saved the cost of an augmentation of this supply, which would have amounted to hundreds of pounds. Owing to the non-completion of the high level

scheme of the Haunley and Togston water supply, on account of lack of funds, the new 50,000 gal. reservoir has not been fully available, owing to the impossibility of feeding the 4-inch trunk main through the existing 3-inch branch about half a mile in length. On account of the fact that the population served by this system has increased from 1,600 from its commencement in 1892 to nearly 4,000 at the present time, the duplication of the main as far as Warkworth Old Barns is daily becoming a more pressing necessity. The Alnmouth water supply was severely tested during the long drought, when the village was full of visitors in summer, and the borehole supply at Bilton Banks was connected in for some weeks. This feeder was found in 1882, when the Company were drifting for coal, and it has been fastened down ever since. A range of pipes has since been laid, about 900 yards in length, and the water brought up to the surface at the pit in a 3-inch pipe. A note at the end of an analysis taken by Mr. Newbigin in September, 1905, states:—"This is a sample of very good water. As I understand it can be kept clear, and shut off from any source of pollution, it would be quite suitable for drinking purposes, and general domestic use." The branch pipe to the steading at Glantles has been re-newed, and an extension of it laid to the cottage by the Council, in accordance with the agreement of the owner of the springs. Various schemes have been considered by your Council, and borings have been made by the Alnwick Castle Authorities, for supplying Chester House, where the pump-well is polluted by sewage, and the village of Acklington, where the nearest grave in the churchyard is about 33 yards off the well, but, unfortunately, no workable scheme has been devised for this small township. An analysis of the water of the pump well at Edlingham New Town, which is 38 feet deep, and near the steading, has been taken, and the report states:—"This is a sample of polluted water. It is not fit for use for drinking purposes." Sir John Swinburn's tenants at this place now carry water from a field drain instead. The storage tank at Broxfield has been enlarged. At Bilton Banks materials have been delivered for a pumping scheme for the Alnwick Castle Authorities to force up part of this supply to Spylaw, Bilton Barns, and High Buston.

The following farms and cottages are badly off for water:—Acklington Low Park (owner the Duke of Northumberland). The well consists of a trough supplied by a field drain which dries up in summer, when water has to be carried about a mile. Middle Cawledge Park (owner Duke of Northumberland). The water supply, which issues into a trough cut off the ground below the level of the cattle yard, frequently dries up, when drinking water is obtained from a small spring, the access to which is across the deep ravine of the burn. Sturton Grange South Side (owner Mr. Fenwick). The well below the level of the onstead dries up in summer, when water has to be carried half a mile. Shipley Lane (owner Mr. W. Podd). Water for drinking purposes is carted in a barrel from a burn, and about 200 yards higher up the stream it is defiled at Small Burns Farm by horses, cattle and ducks.

COMMON LODGING-HOUSE.

Only one of the above exists in this district at Embleton. The ceiling of the living room is not limewashed, but covered with loose paper. It is registered for ten, but was recently found to contain sixteen, since when the overcrowding has been stopped.

FOODS.

The conditions affecting the wholesomeness of foods for human consumption, other than milk, produced or sold in the district, are such that no action has been deemed necessary during the past year.

HOUSING ACCOMMODATION.

Adverting to the Wellhope case, proceedings for which were taken under the Town Planning Act, when a Local Government Inquiry was held, further improvements have been made since the notice was served, and the outside walls have been plastered with cement to prevent the weather getting through on to the bedding. There is a lack of sufficient housing accommodation for the men employed at the whinstone quarries at Embleton, and in some cottages canvas screens have been found across living rooms, and lodgers placed behind. The improvements to the miners houses at Radcliffe are now in abeyance. Three new houses have been built at Togston, two at Alnmouth, one at Dunstan, and one at Togston Barns.

Since the introduction of the Housing regulations in 1910 inspections of the district for houses unfit for human habitation have been commenced, and house-to-house visitations made by the Inspector at the following larger villages, Warkworth, Felton, Glanton, and Embleton. About 400 dwellings have been examined so far, and only one at Glanton, now empty, is unfit for human habitation, and two cases of overcrowding have been put right.

MILK SUPPLY.

No suspicions affecting the wholesomeness of the milk produced or sold in the district have arisen during the past year. Sanitary improvements have been made to the cowsheds at Alnmouth Link End, Bondicar, High Buston, Togston, and Morwick. A badly kept byre at Alnmouth has been removed. Thirty-seven cowsheds are on the register, containing 227 cows. Five cowkeepers export milk to Newcastle-on-Tyne, Blyth, and Whitley Bay.

FACTORY AND WORKSHOP ACT, 1901.

Seventy-nine workshops, and fifteen factories, are on the register. In former years it has been noticed that the great bulk of them are only used by village blacksmiths and joiners who employ one or two men, and no overcrowding, effluvia or unsanitary conditions were found, so in this year fewer inspections have been made. The walls of a blacksmith's shop adjoining a dwelling house at Warkworth have been cemented. A notice has been given regarding a yard at a cartwright's premises at Togston, recently roofed over, and enclosing a privy. Attention has also been drawn to the fact that no conveniences exist for either sex at the fishyards at Craster.

TABULAR STATEMENT OF WORK OF INSPECTOR OF NUISANCES.

	No. of Inspections.	Informal Notices by Inspector.	Informal Notices by Council.	Statutory Notices by Council.	Nuisances Abated.
Ashpits	104	0	1	0	0
Bakehouse	1	0	0	0	0
Common Lodging House	3	0	1	0	0
Ditches & Refuse ...	10	0	5	0	0
Drainage	226	14	13	0	20
Factories & Workshops	19	0	1	0	0
Milk Supply	41	0	2	0	0
Overcrowding	2	0	2	0	2
Pigsties	31	0	1	0	1
Privies, w.c.'s &c.	133	13	9	4	16
Sewerage	67	(Vested in Council)			
Slaughter-houses ...	15	0	2	0	1
Water Supplies	127	0	3	0	0
Miscellaneous	15	8	7	0	2
Totals	794	35	47	4	42

NOTE.—Commencing in June, 1892, I have, in every year, endeavoured to inspect the whole of this rural district, and, in the course of my visits to every township I have called upon every District Councillor, 51 in number.

M. TEMPLE WILSON, Inspector of Nuisances,
Member of the Royal Sanitary Institute.

Before closing this report, I must express my obligation to those who have during the year helped me to carry out my duties.

The County Medical Officer has not only given me good sound advice when I have consulted him, but has also put himself out of his way to come to my help in emergencies.

To the Sanitary Inspector, Mr. M. Temple Wilson, I owe the latter part of this report on Sewage, Drainage, Water Supply, Milk Supply, Housing and Factories and Workshops. The harmonious way in which Mr. Wilson and I are able to work together is certainly to my advantage, and I believe also to that of the district.

To the Clerk of the Council I have been frequently indebted for information as to sanitary law and statistics.

Finally, in thanking the Chairman and Council for their consistent support, I feel that I must record my special indebtedness to the Chairman himself, who naturally knows more than I do of his own business—practical sanitation—yet never fails to communicate to me its most intimate secrets.

SCOTT PURVES, M.D.,
Medical Officer of Health.

TABLE I.
ALNWICK RURAL DISTRICT.
VITAL STATISTICS OF WHOLE DISTRICT DURING 1911 AND PREVIOUS YEARS.

Year.	Population estimated to Middle of each Year	BIRTHS.			Total Deaths Registered in the District.		Transferable Deaths†		Net Deaths belonging to the District.			
		Uncor-rected Number	Net.		Number *	Rate.	of Non-residents registered in the District. †	of Resi-dents not registered in the District. †	Under 1 Year of Age.		At all Ages.	
			Number +	Rate.					Number *	Rate per 1,000 Net Births.	Number *	Rate
1	2	3	4	5	6	7	8	9	10	11	12	13
1906	12676	304	304	23.9	163	12.7		4	38	125	167	13.1
1907	12708	282	282	22.1	171	13.4		8	29	102.8	179	14.0
1908	12740	306	306	24.0	170	13.3		5	32	104.5	175	13.7
1909	12772	286	286	22.3	137	10.7		4	30	104.8	141	11
1910	12804	249	249	19.4	139	10.8		6	22	88.3	145	11.3
1911	12151	260	260	21.3	147	12.0	3	20	18	69.2	164	13.4

Area of District in acres (exclusive of area covered by water) 89,950.

Total population at all ages 12151. Number of inhabited houses 2790. Average number of persons per house 4.3.
At Census of 1911.

TABLE II.

ALNWICK RURAL DISTRICT.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1911.

Notifiable Disease.	Cases Notified in Whole District.							Total Cases Notified in each Locality.		
	At all Ages.	At Ages—Years.					Markworth.	Embleton.	Denwick.	
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.				45 to 65.
Diphtheria (including Membranous croup)	39	1	15	17	3	3	35	4	—	
Erysipelas	7					2	2	5	—	
Scarlet Fever	20		4	12	4		5	15	—	
Enteric Fever	6				3	3	6		—	
Puerperal Fever	2					2	2		—	
Totals.	74	1	19	29	10	10	50	24	—	

ISOLATION HOSPITAL.—Joint Small-pox Hospital with Urban Authority, 3 miles out of Alnwick.
Totals available bed, 12. Number of Diseases that can be concurrently treated, Small-pox only.

TABLE III.
ALNWICK, RURAL, DISTRICT,
CAUSES OF, AND AGES AT DEATH DURING THE YEAR 1911.

Causes of Death.	All Ages.										Total Deaths, whether of "Residents" or "Non-Residents" in Public Institutions in the District.
	I	Under 1 Year.	1 and under 2 years.	2 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards.		
Enteric Fever	3				2		1				
Whooping Cough	2										
Diphtheria and Croup	4		1	1	4						
Influenza	2										
Phthisis (Pulmonary Tuberculosis)	12			1	1	5	1		1		
Tuberculous Meningitis	3				2		6				
Other Tuberculous Diseases	1										
Cancer, Malignant Disease	11						1		6		
Bronchitis	6	1						4	4		
Broncho-Pneumonia	3	1					1	1	1		
Pneumonia (All other forms)	5	1	1				1	1	1		
Other diseases of Respiratory Organs	1										
Diarrhoea and Enteritis	8	6			1			1			
Appendicitis and Typhlitis	1				1						
Cirrhosis of Liver	1							1			
Other accidents and diseases of Pregnancy and Parturition	2						2				
Congenital Debility and Malformation, including Premature Birth	2	2				2	2	1			
Violent Deaths, Excluding Suicides	6				1		1				
Suicides	1					2	1				
Other Defined Diseases	92	6	1	1			13	12	57		
Diseases ill-defined or unknown	1							1			
All Causes	*167	18	3	3	12	9	29	22	71		

NO PUBLIC INSTITUTION.

NO PUBLIC INSTITUTION.

*Net 164, 3 deaths of non-residents being deducted.

TABLE IV. ALNWICK RURAL DISTRICT.
 INFANT MORTALITY. 1911. NETT DEATHS FROM STATED CAUSES AT
 VARIOUS AGES UNDER 1 YEAR OF AGE.

Cause of Death:	Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 1 month.	1-3 months.	3-6 months.	6-9 months.	9-12 months.	Total Deaths under one year.
All Causes.—Certified.	3	2		1	6	2	5	1	4	18
Enteritis						1	3		1	5
Abdominal Tuberculosis ..									1	1
Premature birth					2					2
Asphyxy, Debility, Marasmus	2	2		1	3			1		3
Atelectasis	1				1		1			1
Meningitis (<i>not Tuberculous</i>)										1
Convulsions						1				1
Bronchitis								1		1
Pneumonia, All forms ...							1		2	2
Other Causes										1
	3	2		1	6	2	5	1	4	18

Nett Births in the year { Legitimate 148.
 { Illegitimate 12.
 Nett Deaths in the Year. { Legitimate 17.
 { Illegitimate 1.